C3.158: M3-1(70)-1

CURRENT INDUSTRIAL REPORTS

Manufacturers' Shipments, Inventories, and Orders January 1970



U.S. DEPARTMENT OF COMMERCE / Bureau of the Census

FOR RELEASE: March 4, 1970

A UNITED STATES
DEPARTMENT OF
COMMERCE
PUBLICATION

New orders for manufactured products in January declined \$1.5 billion to \$53.8 billion, after seasonal adjustment, the Bureau of the Census, U.S. Department of Commerce, announced today. This 2.8 percent decline in new orders continued the declines of the last two months. Shipments at \$55.2 billion declined \$100 million from December. The backlog of unfilled orders at \$88.3 billion declined \$1.4 billion from December. Manufacturers' inventories continued to rise with an increase of \$300 million or 0.3 percent to a total of \$96.2 billion from \$95.9 billion at the end of December. The inventories to shipments ratio increased slightly to 1.74 in January from 1.73 in December since inventories increased while shipments decreased slightly.

For the 3 months ending in January, the average monthly change in new orders was a decrease of 1.9 percent compared with an increase of 0.7 percent for the 3 months ending in October and an increase of 0.7 percent for the 3 months ending in July. The average monthly change in new orders for the last 12 months has been an increase of 0.1 percent.

NEW ORDERS

New orders for durable goods declined \$1.6 billion or 5.2 percent from the December total of \$30.3 billion (revised). In the transportation industry, new orders declined \$800 million as both the aerospace and automotive segments declined. New orders in the electrical machinery industry declined \$500 million, reflecting a significant drop in the communications industry. The fabricated metals industry declined \$300 million to \$3.0 billion, but the primary metals industry remained virtually unchanged at \$4.8 billion.

Among the supplementary series, household durables (formerly titled consumer durables) at \$1.9 billion and machinery and equipment (producers' capital goods) at \$6.4 billion each declined \$100 million from December. New orders for defense products declined \$200 million to \$1.9 billion in January from \$2.1 billion in December. (SEE CHART 1)

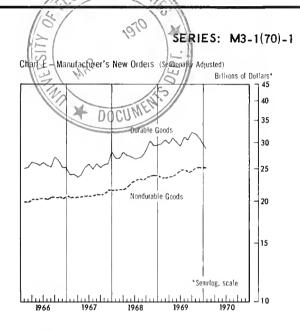
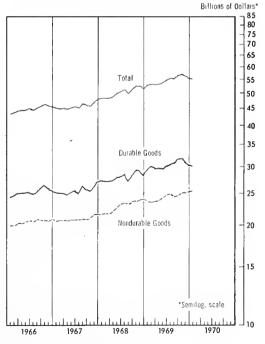


Chart 2 — Manufacturer's Shipments (Seasonally Adjusted)



SHIPMENTS

A decrease of \$200 million in the shipments of durable goods to \$30.0 billion in January was partially offset by an increase in the shipments of nondurables of \$100 million to \$25.2 billion. Changes in shipments of durable goods were mixed across industry lines as increases of \$200 million in primary metals and \$400 million in nonelectrical machinery were offset by an \$800 million decline in transportation. Although all segments of the transportation industry shared in the decline, the aerospace sector led the decline. The pattern in nondurable goods was also mixed as decreases in foods and chemicals were more than offset by increases in other nondurable goods industries. (SEE CHART 2)

UNFILLED ORDERS

Unfilled orders of durable goods at \$85.4 billion were \$1.3 billion or 1.5 percent below the backlog at the end of December. Declines in backlog were general. The backlog of orders in primary metals declined \$300 million to \$7.4 billion at the end of January, and the backlog of transportation equipment declined \$600 million to \$31.0 billion from \$31.6 billion at the end of December. (SEE CHART 3)

INVENTORIES

Inventories in the durable goods industries increased \$400 million to \$64.0 billion from \$63.6 billion in December, but those in the nondurable goods industries decreased \$200 million to \$32.2 billion at the end of January. The dollar gains in stocks of durables were widespread whereas the pattern was mixed among the nondurable goods industries. Increases occurred in all stages of fabrication although work-in-process inventories accounted for almost \$200 million of the overall rise of \$300 million.

The figures on the durable goods industries in this report supersede those issued earlier in the advance report on durable goods. The advance report is based on a tabulation of early reports and is limited to statistics on shipments, new orders, and unfilled orders for a few broad industry categories. The present report is based on more complete reporting, but the estimates are also considered preliminary. Final figures will appear as historical data in the report to be published for next month.

For an explanation of terms used in this report see appendix following table 5.

Inquiries concerning these figures should be addressed to the U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233.

Chart 3 - Manufacturer's Unfilled Orders (Seasonally Adjusted)

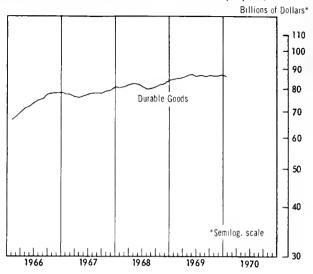
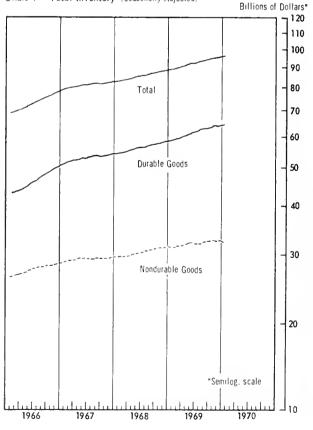


Chart 4 - Total Inventory (Seasonally Adjusted)



Current Industrial Reports Series M3-1(70)-1

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SERIES: M3-1(70)-1 Attachment



U.S. DEPARTMENT OF COMMERCE Bureau of the Census Washington, D.C. 20233

NOTICE

Manufacturers' Shipments, Inventories and Orders Survey
January 1970

The January 1969 data in table 1 for shipments and new orders and in tables 2 and 5 for all items are the seasonally adjusted figures. The correct data without seasonal adjustment are shown in the February 1969 report Series M3-1(69)-2.

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(Millions of dollars)

	Seasonally adjusted Witbout seasonal adjustment						Season	ally adj	usted	Without seasonal					
Industry group	ļ		Nov.	lon	justment Dec.		Jan.	Dog.	Nov		justment	1			
	Jan. 1970 ^p	Dec. 1969	1969 ^r	1970 ^p	1969 ^r	Jan. 1969	1970 ^p	Dec. 1969	Nov. 1969	Jan. 1970 ^P	Dec. 1969	Jan. 1969			
All manufacturing teductrics	Shipments							Total inventories							
	55,185	55,277	55,988	51,642	53,914	52,801	96,165	95,905	95,416	96,379	95,475	89,179			
Total, excluding transportation		47,684	48,068	45,002	45,864	45,517	80,552	80,344	80,028	80,722	79,989	75,052			
,	30,012	30,201	30,944	27,861	30,067	29,325	63,984	63,550	63,076	63,852	63,106	57,789			
Stone, clay, and glass products Primary metals, total	1,500 5,109	1,485 4,945	1,459 5.013	1,270 4,906	1,335 4,651	1,414	2,488 8,170	2,483 8,052	2,471 8,009	2,493 8,282	2,431 8,244	2,293 7,633			
Blast furnaces, steel mills	2,462 2,647	2,354 2,591	2,338 2,675	2,354 2,552	2,121 2,530	2,089 2,419	4,330 3,840	4,312 3,740	4,272 3,737	4,439 3,843	4,502 3,742	4,120 3,513			
Fabricated metal products, total Metal cans, barrels, and drums	3,262 333	3,259 303	3,180 295	2,927 266	3,142 256	2,961 306	6,765 758	6,613 665	6,550 681	6,668 712	6,430 595	6,204 609			
Machinery, except electrical, total Engines and turbines Farm machinery and equipment Construction, mining, and material	5,605 467 492 793	5,228 460 453 651	5,471 388 467	5,080 356 458	5,319 544 393 598	5,222 434 454 679	13,210 982 946 2,225	13,180 983 944 2,245	13,080 983 940 2,210	13,241 985 980 2,254	13,142 967 961	11,561 859 963 1,990			
bandling equipment Metalworking machinery General industrial machinery	358 528	312 507	330 528	320 476	342 490	345 454	1,112 1,109	1,123	1,096 1,084	1,108	2,268 1,101 1,099	1,990 1,012 971			
Electrical machinery, total	3,536	3,609	3,739	3,284	3,699	3,620	9,460	9,346	9,327	9,306	9,193	8,422			
Electrical transmission and distribution equipment and industrial apparatus Household appliances, including radio	650	659	706	587	668	685	1,948	1,943	1,919	1,951	1,940	1,791			
and TV	669 1,076	671 1,092	694 1,084	607 990	658 1,163	755 1,037	2,168 2,802	2,084 2,774	2,135 2,741	2,101 2,751	2,016 2,727	1,808 2,530			
Transportation equipment, total	6,791 3,641 2,566	7,593 3,735 3,133	7,920 4,044 3,200	6,640 3,701 2,403	8,050 3,865 3,465	7,284 4,117 2,595	15,613 4,186 9,502	15,561 4,156 9,547	15,388 4,063 9,425	15,657 4,261 9,468	15,486 4,181 9,460	14,127 4,385 8,110			
Instruments and related products	1,170 3,039	1,142 2,940	1,186 2,976	1,035 2,719	1,213 2,658	1,089 3,227	2,449 5,829	2,476 5,839	2,434 5,817	2,399 5,806	2,420 5,760	2,193 5,356			
Nondurable goods industries, total	25,173	25,076	25,044	23,781	23,847	23,476	32,181	32,355	32,340	32,527	32,369	31,390			
Food and kindred products, total Meat products	8,463 1,774	8,624 1,772	8,390 1,780	8,099 1,765	8,414 1,790	7,669 1,661	7,231 806	7,230 804	7,302 761	7,448 849	7,506 775	7,490 721			
Tobac∞ products Textlle mill products	458 1,785	438 1,745	436 1,774	415 1,633	431 1,647	414 1,790	2,165 3,448	2,200 3,501	2,233 3,447	2,302 3,439	2,279 3,417	2,359 3,500			
Paper and allied products, total Pulp, paper, etc	2,311 957	2,283 1,001	2,292 973	2,202 921	2,187 959	2,172 899	2,655 1,032	2,632 1,017	2,614 1,037	2,620 1,024	2,613 1,024	2,370 934			
Chemicals and allied products, total Industrial chemicals, except pigments	4,073 1,426	4,110 1,432	4,255 1,453	3,880 1,340	3,670 1,310	3,935 1,323	6,591 2,266	6,634 2,286	6,566 2,249	6,674 2,311	6,635 2,300	6,060 2,059			
Petroleum and coal products	2,233	2,140	2,155	2,190	2,128	1,894	2,283	2,274	2,197 1,871	2,260	2,262	2,047			
All other nondurable goods industries	1,365 4,485	1,365 4,371	1,449 4,293	1,287 4,075	1,317 4,053	1,301 4,301	1,927 5,881	1,888 5,996	6,110	1,936 5,848	1,882 5,775	1,818 5,746			
			New o	rders			Unfilled orders								
All manufacturing industries:															
Total Total, excluding transportation	53,826 47,629	55,362 48,367	56,242 47,813	51,235 45,148	53,424 46,291	53,119 45,632	88,349 57,339	89,714 58,109	89,583 57,383	88,008 56,987	88,412 56,839	87,126 53,232			
Durable goods industries, total	28,727	30,295	31,188	27,514	29,612	29,684	85,377	86,668	86,530	85,098	85,445	84,150			
Primary metals, total	4,793	4,760	4,751	4,927	4,683	4,675	7,408	7,726	7,909	7,524	7,501	6,596			
Blast furnaces, steel mills	2,086 3,038	2,007	2,190	2,241	2,044 3,153	2,124 2,755	3,544	3,921 10,854	4,267 10,684	3,651 10,518	3,764 10,446	3,229 9,799			
Fabricated metal products	5,458 535	3,384 5,548 619	3,276 5,453 389	2,998 5,146 428	5,506 651	5,350 494	10,631 17,096 4,886	17,243 4,820	16,926 4,661	17,055 4,851	16,993 4,781	14,885 4,099			
Construction, mining, and material bandling equipment	768	677	692	737	619	696	2,178	2,204	2,178	2,155	2,127	1,715			
Metalworking machineryGeneral industrial machinery	319 502	264 576	341 510	299 480	287 541	340 472	1,758 1,663	1,797 1,689	1,846 1,620	1,758 1,646	1,779 1,643	1,747 1,482			
Electrical machinery, total Electrical transmission and distribution equipment and industrial apparatus	3,622 665	4,110 826	3,619 688	3,342 605	4,045 820	3,581 627	13,597 3,523	13,512 3,508	13,013 3,342	13,461 3,496	13,401 3,477	13,035 3,249			
Housebold appliances, including radio and TV	658	694	622	634 970	658 1,346	745 1,020	582 5.555	593 5,564	570 5 255	577 5,533	550 5,553	573 5,492			
Transportation equipment, total Aircraft, missiles, and parts	6,197	1,402 6,995	1,111 8,429	6,087	7,133	7,487	5,555 31,010 23,706	31,605	5,255 32,200	31,021 23,704	31,573 24,163	33,894 26,954			
All other durable goods industries	2,060 5,619	2,728 5,498	3,2 7 9 5,660	1,944 5,014	2,774 5,092	2,690 5,836	5,635	24,212 5,728	24,615 5,798	5,519	5,531	5,941			
Nondurable goods industries, total	25,099	25,067	25,054	23,721	23,812	23,435	2,972	3,046	3,053	2,910	2,967	2,976			
Industries with unfilled orders Industries without unfilled orders	6,926 18,173	6,804 18,263	6,853 18,201	6,493 17,228	6,542 17,270	6,494 16,941	2,972	3,046 -	3,053	2,910 -	2,967	2,976			
P			L												

⁻ Represents zero. Preliminary. Revised.

Adjusted for trading-day and calendar-month variations.

Table 2.--value of manufacturers' shipments, inventories, and orders, for market categories and supplementary series

(Millions of dollars)

Industry group	Seasonally adjusted			Without seasonal adjustment 1			Seaso	nally adj	justed	Without seasonal adjustment				
The state of the s	Jan. 1970 ^p	Dec. 1969 ^r	Nov. 1969 ^r	Jan. 1970 P	Dec. 1969 ^r	Jan. 1969	Jan. 1970 P	Dec. 1969 ^r	Nov. 1969	Jan. 1970 ^p	Dec. 1969	Jan. 1969		
	Shipments							Total inventories						
All manufacturing industries, total	55,185	55,277	55,988	51,642	53,914	52,801	96,165	95,905	95,416	96,379	95,475	88,905		
Durable goods industries, total	30,012 25,173	30,201 25,076	30,944 25,044	27,861 23,781	30,067 23,847	29,325 23,476	63,984 32,181	63,550 32,355	63,076 32,340	63,852 32,527	63,106 32,369	57,879 31,026		
Industry groups arranged by market categories: Home goods and apparel	4,489 10,875	4,505 11,035	4,354 10,827	3,969 10,343	4,002 10,696		12,113	9,922 12,084	9,988 12,152	9,698 12,413	9,562 12,381	9,360 11,696		
automotive	9,130 4,212	9,146 4,332	9,459 4,647	8,277 4,230	9,682 4,395	8,764 4,642	25,879 5,305	25,865 5,277	25,587 5,157	25,791 5,412	25,639 5,304	22,475 5,281		
intermediate products Other materials and supplies and intermediate products	4,554	4,537	4,595 22,106	3,864 20,939	4,152	4,444 20,157		8,001 34,756	7,939 34,593	7,989 35,076	7,870 34,719	7,538 32,555		
Supplementary series: 2 Household durable goods industries Machinery and equipment industries Defense products industries (old series). Defense products (new series)	1,943 6,386 3,930 1,804	1,984 6,179 4,518 2,284	1,951 6,432 4,549 2,244	1,770 5,788 3,658 1,681	1,852 6,393 4,905 2,473	2,153 6,102 3,971	5,167 16,422 13,146	5,092 16,305 13,204 7,472	5,166 16,240 13,056 7,615	5,084 16,386 13,057 7,461	4,965 16,223 13,049 7,387	4,579 14,308 11,571 7,227		
			New	orders			Unfilled orders							
All manufacturing industries, total	53,826	55,362	56,242	51,235	53,424	53,119	88,349	89,714	89,583	88,008	88,412	87,469		
Durable goods industries, total Nondurable goods industries, total	28,727 25,099	30,295 25,067	31,188 25,054	27,514 23,721	29,612 23,812		85,377 2,972	86,668 3,046	86,530 3,053	85,098 2,910	85,445 2,967	84,431 3,038		
Industry groups arranged by market categories: Home goods and apparel	4,442 10,867	4,528 11,028	4,283 10,826	3,996 10,336	3,965 10,694	9,945	J 1,963	2,017	2,000	1,939	1,939	2,186		
automotive	8,855 4,095	9,570 4,297	10,021 4,773	8,138 4,140	9,636 4,342		48, 121	48,515	48,128	, í	48,193	47,649		
intermediate products Other materials and supplies and intermediate products	4,154	4,490 21,449	4,708	3,812	4,024 20,763	4,333	,	10,886 28,296	10,888 28,567	10,325 27,783	10,378 27,902	10,169 27,465		
Supplementary series: 2 Household durable goods industries Machinery and equipment industries Oefense products industries (old series). Defense products (new series)	1,897 6,379 3,413 1,867	2,001 6,490 4,400 2,108	1,890 6,696 4,630 2,419	1,785 5,956 3,182 1,781	1,815 6,535 4,361 2,018	6,204 4,025	25,117 29,755	1,642 25,126 30,273 20,419	1,625 24,818 30,390 20,595		1,563 24,794 30,203 20,462	1,795 22,242 33,163 21,786		

^{*}During 1968 manufacturers in ordnance, communications, aircraft and aircraft parts, and shipbuilding industries began to provide aggregate figures on shipments, orders, and total inventories of work performed for the Department of Defease. The results of these reports are included in these new defense series. Since there is no historical data available to develop separate seasonal factors for these reporters, the data have been seasonally adjusted using the factors of these industries. Preliminary. Revised. Shipments and new orders adjusted for trading-day and calendar-month variations; unfilled orders and inventories as of end of month. The supplementary series are regroupings of the separate industry categories as follows:

Household durable goods industries - Household furniture; kitchen articles and pottery; cutlery, handtools, and hardware; household appliances; opbthalmic goods, watches, and clocks; and miscellaneous personal goods.

Machinery and equipment industries - Machinery, except electrical (excluding farm machinery and equipment and machine shops), electrical machinery (excluding household appliances, communication equipment and electronic components), sbipbuilding and repairing, and railroad and street car equipment.

Defense products industries (old series) - Based on reports for companies classified in the communication equipment, complete aircraft, aircraft parts, and ordnance industries. (Thus, this series includes significant amounts of nondefense work in these industries and omits defense work performed in the shipbuilding industry.)

Defense products (new series) - Based on separate reports on defense work filed by large defense contractors in the following industries: ordnance, communications, complete aircraft, aircraft parts, and shipbuilding. Thus, it differs from the old series in that it includes defense activity in shipbuilding and excludes nondefense work in ordnance, communications, complete aircraft, and aircraft parts. The data are comparable to those published annually in the MA-175, Shipments of Defense-Oriented Industries, for the specified industries.

Table 3.--MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS MONTH-TO-MONTH AND LONG TERM PERCENT CHANGES

(Based on seasonally adjusted data)

	Mostb	-to-montb		Aver	age monthly	Average, 1964-1969			
Item and industry group		Nov Dec. 1969 ^T	0ct Nov. 1969		3 months		12 months		
	Dec1969- Jan. 1970			Oct. 1969- Jan. 1970	July 1969 Oct. 1969		Jan. 1969 Jan. 1970	Average rise	Average decline
Shipments: All manufacturing industries	-0.2	-1.3	-1.8	-1.1	+1.0	+1.3	+0.4	±1.4	-1.
Durable goods industries, total Nondurable goods industries, total		-2.4 +0.1	-3.0 +0.3	-2.0 +0.1	+1.4 +0.4	+1.1 +1.6	+0.2 +0.6	+1.9 +1.0	-2. -0.
Total inventories: All manufacturing industries	+0.3	÷0.5	±0.5	+0.4	+0.6	+O.8	+0.6	+0.7	٠.
New orders: All manufacturing industries Durable goods industries, total Nondurable goods industries, total	-5.2	-1.6 -2.9 +0.1	-1.2 -1.9 -0.3	-1.9 -3.3 0.0	±0.7 ±0.8 ±0.6	+0.7 +0.2 +1.4	+0.1 +0.2 +0.6	+1.8 +3.1 +1.1	-1. -2. -0.
Unfilled orders: Durable goods industries, total	-1.5	±0.2	+0.3	-0.3	0.0	0.0	±0.1	+1.1	+0.

Table 4 .-- RATIO OF MANUFACTURERS' INVENTORIES TO SHIPMENTS AND UNFILLED ORDERS TO SHIPMENTS, BY INDUSTRY GROUP (Based on seasonally adjusted data)

Industry group	lnver	tories - s	bipments r	atio	Unfilled orders - shipments ratio ¹ months' backlog)					
industry group	Jan. 1970 ^p	Dec. 1969	Nov. 1969 ^r	Jan. 1969	Jan. 1970 ^p	Dec. 1969	Nov. 1969	Jan. 1969		
All manufacturing industries, total	1.74	1.73	1.70	1.68	2.58	2.62	2.57	2.68		
Durable goods industries, total	2.13	2,10	2.04	1.97	3.13	3.16	3.09	3.22		
Stone, clay, and glass products. Primary metals. Fabricated metals. Machinery, except electrical Electrical machicery Transportation equipment. Instruments and related products Nondurable goods industries, total	1.66 1.60 2.07 2.36 2.68 2.30 2.09	1.67 1.63 2.03 2.52 2.59 2.05 2.17	1.69 1.60 2.06 2.39 2.49 1.94 2.05	1.62 1.67 2.12 2.21 2.36 1.93 2.06	(NA) 1.45 3.63 3.05 3.85 6.71 (NA)	(NA) 1.56 3.33 3.30 3.74 4.16 (NA)	(NA) 1.58 3.70 3.09 3.48 5.88 (NA)	(NA) 1.44 3.73 2.86 3.64 7.17 (NA)		
Food and kindred products. Tobacco products. Textile mill products. Paper and allied products. Chemicals and allied products. Petroleum and coal products. Rubber and plastics products, p.e.c.	0.85 4.73 1.93 1.15 1.62 1.02	0.84 5.02 2.01 1.15 1.61 1.06	0.87 5.12 1.94 1.14 1.54 1.02 1.29	0.95 5.36 1.96 1.11 1.52 1.09	(X) (X) (NA) (NA) (X) (X)	(X) (X) (NA) (NA) (X) (X) (X)	(X) (X) (NA) (NA) (X) (X) (X)	(X) (X) (NA) (NA) (X) (X) (X)		

⁽NA) Not available. Preliminary. Revised. (X) Not applicable.

*Excludes the following industries with no unfilled orders: Wooden containers; glass containers; metal cans, barrels and drums; motor vehicle assembly operations; foods and related products; tobacco; apparel and related products; chemicals; petroleum and coal products; and rubber and plastics products, n.e.c.

Table 5.--VALUE OF MANUFACTURERS' INVENTORIES, 8Y STAGE OF FABRICATION, BY INDUSTRY GROUP (Millions of dollars)

			`	5 01 001										
Industry group	Seasonally adjusted			Without seasonal adjustment			Season	ally adj	usted	Without seasonal adjustment				
	Jan. 1970 ^p	Dec. 1969	Nov. 1969	Jan. 1970 ^p	Dec. 1969	Jan. 1969	Jan. 1970 ^p	Dec. 1969	Nov. 1969	Jan. 1970 ^p	Dec. 1969	Jan. 1969		
	Total							Materials and supplies						
All manufacturing industries, total	96,165	95,905	95,416	96,379	95,475	88,905	29,425	29,364	29,157	29,592	29,690	28,20		
Durable goods industries, total	63,984	63,550	63,076	63,852	63,106	57,879	17,663	17,572	17,194	17,619	17,711	16,70		
Stone, clay, and glass products Primary metals Machinery (electrical and nonelectrical). Transportation equipment	2,488 8,170 22,670 15,613 15,043	2,483 8,052 22,526 15,561 14,928	2,471 8,009 22,407 15,388 14,801	2,493 8,282 22,547 15,657 14,873	2,431 8,244 22,335 15,486 14,610	2,289 7,528 20,079 14,076 13,907	809 2,927 5,563 3,210 5,154	796 2,824 5,556 3,293 5,103	770 2,771 5,456 3,078 5,119	806 2,962 5,509 3,241 5,101	806 3,004 5,549 3,288 5,064	73: 2,800 4,863 3,348 4,965		
Nondurable goods industries, total	32,181	32,355	32,340	32,527	32,369	31,026	11,762	11,792	11,963	11,973	11,979	11,49		
Chemicals and allied products	6,591 2,283 1,927 21,380	6,634 2,274 1,888 21,559	6,566 2,197 1,871 21,706	6,674 2,260 1,936 21,657	6,635 2,262 1,882 21,590	5,977 2,068 1,811 21,170	2,256 513 600 8,393	2,281 503 600 8,408	2,279 499 612 8,573	2,264 497 596 8,616	2,292 496 589 8,602	2,102 455 570 8,370		
			Work in	process			Finished goods							
All manufacturing industries, total	35,077	34,896	34,716	34,924	34,462	31,622	31,663	31,645	31,541	31,863	31,323	29,08		
Durable goods industries, total	30,038	29,796	29,660	29,933	29,471	26,631	16,283	16,182	16,222	16,300	15,924	14,54		
Stone, clay, and glass products	402 2,853 10,742 10,787 5,254	407 2,780 10,702 10,683 5,224	408 2,779 10,650 10,742 5,081	395 2,893 10,724 10,762 5,159	378 2,793 10,598 10,645 5,057	372 2,506 9,611 9,289 4,853	1,277 2,390 6,365 1,616 4,635	1,280 2,448 6,268 1,585 4,601	1,293 2,459 6,301 1,568 4,601	1,292 2,427 6,314 1,654 4,613	1,247 2,447 6,188 1,553 4,489	1,180 2,223 5,600 1,439 4,089		
Nondurable goods industries, total	5,039	5,100	5,058	4,991	4,991	4,991	15,380	15,463	15,319	15,563	15,399	14,53		
Chemicals and allied products Petroleum and coal products Rubber and plastics products, n.e.c All other nondurable goods industries	962 520 318 3,239	968 541 317 3,274	940 506 318 3,294	962 506 317 3,206	965 523 316 3,187	909 453 334 3,295	3,373 1,250 1,009 9,748	3,385 1,230 971 9,877	3,347 1,192 941 9,839	3,448 1,257 1,023 9,835	3,378 1,243 977 9,801	2,96 1,16 90 9,50		

Preliminary. Revised.

Appendix

The following is a description of the survey and definitions used. These are provided to clarify the meaning of the items involved and do not represent any revisions from those definitions previously employed.

DESCRIPTION OF THE SURVEY

The Manufacturers' Shipments, Inventories, and Orders survey provides monthly figures that are comparable to the annual totals published each year in the annual survey of manufactures (ASM). The ASM is based on a sample of approximately 60,000 manufacturing establishments drawn from the 5-year census universe of about 310,000 estab-In the ASM, each manufacturing establishment provides data on employment, payrolls, shipments, cost of materials, capital expenditures, and inventories as well as other selected items. The establishments do not provide information on unfilled orders or new orders. Since the ASM is establishment based, it provides data for each of the 425 manufacturing industries in the Standard Industrial Classification System (SIC) and area data for industry groups.

The monthly survey M3-1 does not provide information at the complete SIC industry detail because of the smaller size of the reporting panel and the fact that most companies cannot provide shipments, inventories, and orders data monthly for individual establishments.

The monthly reporting panel consists of approximately 5,000 reporting units and includes virtually all companies with 1,000 or more employees and a sample of the smaller ones. The reporting unit typically comprises the entire operations of a company although many of the larger diversified companies file separate divisional type reports for their operations in different industries.

Most of the reporting units include mixed industry activity even within the broad industry categories of the monthly survey. The survey methodology assumes that the month-to-month changes of the reporting units classified in each industry category represent effectively the month-to-month movements of the establishments in the SIC industries which make up the category. Thus, the monthly reports are used to update the ASM estimates by using a link relative of matched companies in each industry.

EXPLANATION OF TERMS

Value of Shipments.—Shipments in the monthly survey are equivalent to value of shipments as reported in the ASM which are received or receivable net selling values, f.o.b. plant, after discounts and allowances and excluding freight charges and excise taxes. Included in shipments are the value of all products sold, transferred to other plants of the same company, or shipped on consignment.

Shipments also include receipts of establishments in the industry for contract work performed for others, resales, receipts for miscellaneous activities such as the sale of scrap and refuse; value of installation and repair work performed by employees of the plant; and value of research and development performed at the plant. In the aircraft industry and shipbuilding, the value of work done in a given year varies considerably from the value of shipments because of the long lead time between the input of the materials and labor and the shipments of the completed aircraft or ship. In the annual survey, therefore, the value of work done during the year is requested rather than the value of shipments.

The value of shipments figures developed from the ASM contain duplication at the all manufacturing and industry group levels since the products of some industries are used as materials by other industries within the industry group. With the exception of motor vehicles, it is not significant at the 4-digit SIC group level. Since the M3-1 industry categories typically are groupings of industries, this duplication is significant for the all manufacturing, durable goods and nondurable goods categories and the various market groups. The significance of the duplication within the specific M3-1 industry groups varies depending on the 4-digit industry composition of these groups. It is most pronounced in a few highly integrated industry areas such as primary metals and motor vehicles and parts.

Since most monthly reports are for the entire company or major divisions rather than establishments, the companies are requested to report net sales, i.e., total company billings after discounts and allowances. Companies which file divisional reports are requested to treat transfers from one division of the company to another as if they were net sales to outside customers. Although this

definition of shipments in the monthly reports differs from that used in the annual establishment reports, it is assumed that the month-to-month changes in company sales in the industry are representative of the month-to-month shipments of the establishments in the industry.

Inventories—End-of-month inventories in the monthly survey are identical in definition to the end-of-year inventories in the ASM. In the ASM, respondents are asked to report inventories of individual establishments at approximate current cost if feasible; otherwise, "at book values." Since different methods of inventory valuation are used (LIFO, FIFO, etc.), the definition of the aggregate inventories for establishments in an industry is not precise. The figures on the change in inventories from one period to the next are of greater significance than the actual aggregates.

Inventories are reported by stage of fabrication: (a) finished goods; (b) work in process; and (c) materials, supplies, fuel, and other In using inventories by stage of inventories. fabrication at the all manufacturing and 2-digit industry levels as well as for the durable and nondurable goods sectors, it should be noted that a finished product of one industry may be a raw material for another industry at the next stage of fabrication. Insofar as the durable and nondurable goods sectors and also the 2-digit industry groups contain industries with successive stages of processing, the same type of commodity may be included under different inventory categories in the aggregate statistics.

New Orders Received and Unfilled Orders—Orders as reported in the monthly survey are net of cancellations during the month. They include orders received during the period and also filled during the period as well as those orders received for future delivery. They also include the net sales value of contract change documents which increase or decrease the sales value of the unfilled orders to which they relate. Orders include only those supported by binding legal documents such as signed contracts, or letter contracts. In case of letter contracts the full amount of the sales value is included if the parties are in substantial agreement on the amount; otherwise, only the funds specifically authorized to be expended are in-

Unfilled orders include orders as defined above that have not yet passed through the sales account. Generally, unfilled orders at the end of the reporting period are equal to unfilled orders at the beginning of the period plus net new orders received less net sales.

cluded. The respondent is instructed to deduct

the sales value of partial or complete cancellation

of existing orders.

While both new orders and unfilled orders are used in reviewing individual company reports for consistency, only unfilled orders are estimated directly in the tabulated totals. New orders are derived from the shipments plus net change in unfilled orders for each industry category. This procedure is followed for seasonally adjusted data as well as for the unadjusted data. Shipments and unfilled orders are seasonally adjusted independently. Seasonally adjusted new orders are derived from seasonally adjusted shipments and seasonally adjusted unfilled orders.